# A NEW GENUS OF SARCOPHAGIDAE (DIPTERA) BASED ON AN AUSTRALIAN SPECIES LIVING ON SPIDER EGG CASES

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#### Abstract

Baranovisca n. gen. is described to accommodate B. arachnivora sp. n. known from a male and female taken at Hornsby Heights, New South Wales, while emerging from the egg sac of a magnificent spider, Dicrostichus magnificus.

#### Introduction

Mr M. R. Gray, Arachnologist of the Australian Museum, Sydney, sent to me for identification, a male and a female of a fly "found emerging from the egg sac of the Magnificent Spider, *Dicrostichus magnificus*. These spiders have large, conspicuous, spindle-shaped egg sacs and are probably ideal targets for parasitism." The above notes were communicated by Mr Gray. In 1959 I described *Parasarcophaga reposita*, also reared from an egg sac of a spider.

## Baranovisca n. gen.

Type species: arachnivora n. sp. (Australia).

Predorsocentral and preacrostichal bristles differentiated; four long postdorsocentrals; arista short plumose, vibrissa near oral margin, not approximated; episternum bare; only  $R_{4+5}$  with hairs, apical cell largely open; male genital segments brown, first without marginal bristles; second abdominal sternite with long, third and fourth with short hairs, fifth with few bristles internally (Fig. 1); cerci more or less parallel; theca of penis well sclerotized, large; styli of glans slender; female syntergite VI-VII entire. The genus differs from *Pterophalla* Rohdendorf, 1965, by the well sclerotized ventralia.

Besides the type species, Parasarcophaga (Rosellea) reposita Lopes, 1959, from New South Wales; Parasarcophaga (Rosellea) praelibera Lopes, 1959, from Rabaul, New Britain; Sarcophaga banksi Senior-White, 1924, from Luzon, Philippine Islands, and Pierretia litsingeri Shinonaga and Barrion, 1980, from Philippine Islands, belong to this genus. Johnstonimyia fatua Lopes, 1967, from Manus Is., Bismarck Archipelago, shows most of the external characters referred for the genus but the apical plate is very different and the ventralia is spinous, elongate.

The type species, *B. reposita* (Lopes) and *B. litsingeri* (Shinonaga and Barrion) were reared from spider egg cases. The genus was named after N. Baranov in honour of his significant work.

### Baranovisca arachnivora n. sp. (Figs 1-9)

Types.-Holotype  $\delta$  and paratype  $\Im$ , Hornsby Heights, New South Wales, Australia, M. R. Gray, 10.ii.1980 (KS 6986-Aust.Mus.), parasite in egg sacs of Dicrostichus magnificus, in Australian Museum, Sydney.

Male.-Length: 9 mm. Head yellow, back of head yellowish grey; front about 0.17 of head width; 12 frontal bristles, all but two superior ones directed

inwards; ocellar bristles very small; reclinate frontorbital bristle shorter than biggest frontal; outer vertical not differentiated; parafrontalia and parafacialia with some black hairs, the latter with a row of long hairs near eyes; back of head with  $2 \cdot 3$  series of black hairs besides the post-ocular setae, remaining hairs yellow; gena with black hairs; facialia hairy on little less than inferior half; cheek grooves yellow pollinose; antenna grey, basal segments darkened, somewhat reddish on apex of second segment, reaching about 0.87 of the distance to vibrissal level, second segment about 0.54 length of third.

Thorax yellowish grey, humeral region more yellowish, four small preacrostichal bristles; four to five scarcely differentiated post-acrostichals; prescutellar pair long: four pre-dorsocentrals; four post-dorsocentrals, posterior two very long; 2:3 intra-alars; 2:3 supra-alars; two strong and some small lateral scutellar bristles, long preapical and crossed apical bristles; three bristles, median one inserted a little below others, on katepisternum; nine bristles on meron. Wings with brown and yellow veins, costal spine scarcely differentiated;  $R_{4+5}$  hairy for a little more than half of the distance from base to transverse vein; legs black, ventral side of femora, especially the base of middle femur, with some long hairs; middle and hind tibiae with ventral bristles, the latter with a series of bristles on anterior side, like *B. reposita* (Lopes, 1959; Fig. 94).

Abdomen grey, slightly yellowish, fourth tergite with an almost complete row of short bristles; first and second sternites with long hairs; third and fourth with short hairs, all black; fifth sternite with internal small bristles (Fig. 1). Genital segments brown, sixth tergite represented by a slender stripe near spiracle; first genital segment without differentiated marginal bristles, having long dorsal hairs; second with long hairs; cerci somewhat sinous, surstylus almost triangular (Figs 2, 3); theca well individualized, membrane between theca and paraphallus largely membranous, apical plate with sclerotized apophysis and three apical membranous lobes; lateral plates small; ventralia conspicuous, apically with sharp points (Figs 4, 6); styli long, almost parallel (Fig. 5).

Female.—Length: 9 mm. Front about 0.25 of head width, outer vertical bristles about four fifths length of inner one; anterior proclinate frontorbital bristles conspicuously longer than superior and reclinate ones; antenna reaching about 0.9 of the distance to vibrissae, second segment about 0.37 length of third; parafacialia about 0.37 of the distance between vibrissae. Scutellum without apical bristles; costal spine a little longer than in male; besides the series of bristles on anterior side, the hind tibia presents three ventral bristles; genital syntergite VI-VII with strong marginal bristles, tergite VIII represented by slender plates; sternite VI-VII with four strong marginal bristles, sternite IX mostly membranous with marginal small hairs (Figs 7, 8). Spermathecae with almost smooth distal part (Fig. 9).

Note.-B. arachnivora n. sp. is very near reposita (Lopes) showing well different genital structures especially the apical membranous lobes of the apical plate.



Figs 1-9. Baranovisca arachnivora n. sp. Male: (1) fifth sternite; (2) genital segments;
(3) apex of cercus; (4) phallic organs; (5) penis, ventral view (without ventralia);
(6) ventralia, ventral view. Female: (7) genitalia; (8) genital sternites; (9) spermathecae.

### Acknowledgement

This work was undertaken in the laboratories of Universidade Santa Ursula and Museu Nacional, Rio de Janeiro, and was partially supported by the Conselho Nacional de Desenvolvimento Científico e Technologico, CNPq.

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